

## **REMARKS**

The Applicants have carefully considered this application in connection with the Examiner's Action and respectfully request reconsideration of this application in view of the following remarks.

The Applicants originally submitted Claims 1-27. In response to a Restriction Requirement in the the Official Action of May 19, 2002, the Applicants elected, without traverse, to prosecute Claims 1-8, comprising Group I cancel Group II (Claims 9-15) and Group III (Claims 16-27). In a preliminary amendment, the Applicants amended Claim 1 and canceled Claim 7 without prejudice or disclaimer. In response to the present Office Action the claims have not been amended. Accordingly, Claims 1-6 and 8 are currently pending.

### **I. Formal Matters and Objections**

The Draftsperson has objected to the specification as containing informalities. Namely, in FIGURE 2, the two views shown were not labeled separately or properly. In response, the Applicants have amended FIGURE 2 to depict two separately labeled drawings, FIGURE 2A and FIGURE 2B. Accordingly, the Applicants submit herewith an amended FIGURE 2A and FIGURE 2B, along with a red-lined FIGURE 2A and FIGURE 2B to assist the Examiner and Draftsperson in determining the extent to which the Applicants have amended the figure. In addition, the Specification in paragraphs [0017] and [0027] have been amended to be consistent with the amended figure. Also, paragraph [0032] has been amended to correct an inadvertent error where FIGURE 2 was mistakenly cited, instead of FIGURE 3. Finally, additional language has been added to

paragraph [0032] to clarify that FIGURE 3 is comparing an A32 pad to an IC1000/SUBA IV pad stack.

## **II. Rejection of Claims 1-6 and 8 under 35 U.S.C. §103**

The Examiner has rejected Claims 1-4, 6 and 8 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,117,000 to Anjur *et al.* ("Anjur") in view of U.S. Patent No. 4,446,254 to Nakee *et al.* ("Nakee"). The Examiner has also rejected Claim 8 under 35 U.S.C. §103(a) as being unpatentable over Anjur. Claim 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over Anjur in view of Nakee and further in view of U.S. Patent No. 6,099,954 to Urbanavage *et al.* ("Urbanavage").

The Applicants respectfully maintain that the claimed invention is not obvious in view of the foregoing combined references, and that various combinations of these reference fail to establish a *prima facie* case of obviousness of Claims 1-6 and 8.

The asserted combination of Anjur and Nakee, for instance, fail to teach or suggest all of the elements of the invention recited in independent Claim 1. As acknowledged by the Examiner, Anjur fails to teach or suggest a polishing body comprising a cross-linked polymer having a hardness ranging from about 34 Shore A to about 60 Shore A. To cure this deficient teaching, the Examiner asserts that Nakae's disclosure of a cross-linked polyolefin foam would make it obvious to replace Anjur's polyurethane polishing body so as to increase elastic deformation during polishing. The Examiner further asserts that it would be obvious to replace Anjur's polyurethane pad having a hardness within the range recited in Claim 1 because this merely involves using routine skill to discover an optimum or workable range. The Applicants respectfully disagree.

The Applicants can find no teaching or suggestions in Nakae of cross-linked polymers of having any utility as polishing pads, nor of cross-linked polymers having increased elastic deformation during polishing. Moreover, the Applicants can find no indication anywhere in Nakae of a cross-linked polymer having a hardness ranging from about 34 Shore A to about 60 Shore A being disclosed or suggested. In fact, the Applicants can find no recitation of any hardness values whatsoever in Nakae. It follows therefore, that Nakae fails to teach or suggest a cross-linked polymer having the range of hardness recited in Claim 1.

In addition, the asserted combination of Anjur and Nakae fails to establish a *prima facie* case of obviousness because the asserted combination is improper. The combination of Anjur and Nakae is improper because a person having ordinary skill in the art would not be motivated to add the teachings or suggestions of Nakae to Anjur, because Nakae does not address the problem of providing materials for polishing pad. Anjur indicates that a lower density less rigid substrate can be prepared by sintering polyurethane thermoplastic resin particles that are highly irregular in shape. The use of such particles is thought to provide a porous substrate with a high void volume, which provides effective slurry control and distribution. (Column 7, Lines 9-35)

In contrast, Nakae is concerned with improving the usefulness of polyolefin foams as building, packaging or floating materials by increasing their fire retardancy (Column 1, Lines 15-28; Column 2, Lines 55-61). Nakae actually teaches away from the present invention, in that Nakae teaches that crosslinked polyethylene foams have the potential to be irreversibly deformed beyond recognition of their original form at temperatures higher than 130°C (Column 3, Lines 38-40). The Applicants respectfully submits that Nakae's teaching of crosslinked polyolefin foams being irreversibly deformed at high temperatures would deter one skilled in the art from replacing

polyurethane thermoplastic resin particles with a cross-linked polymer in Anjur's sintering process.

Moreover, even if one skilled in the art were to do so, there is no teaching or suggestion in the combination of Anjur and Nakae that the crosslinked polymer recited in Claim 1 could be obtained.

In conclusion, because the asserted combination of Anjur and Nakae fails to teach or suggest all of the elements of the inventions of Claim 1, and this combination is improper, the Examiner cannot establish a *prima facie* case of obviousness of Claim 1 or its dependent claims. The Applicant therefore respectfully traverse the Examiner's rejections of Claims 1-6 and 8 under 35 U.S.C. §103(a) and request the Examiner to withdraw the rejection.

### **III. Prior Art Made of Record**

The Applicant believes that the prior art made of record and not relied upon by the Examiner is not particularly pertinent to the claimed invention, but the Applicant retains the right to address these references in detail, if necessary, in the future.

### **IV. Conclusion**

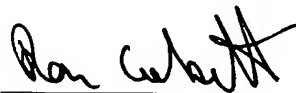
In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a timely Notice of Allowance for Claims 1-6 and 8.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972)

480-8800 if such would further or expedite the prosecution of the present application.

Respectfully submitted,

HITT GAINES, P.C.



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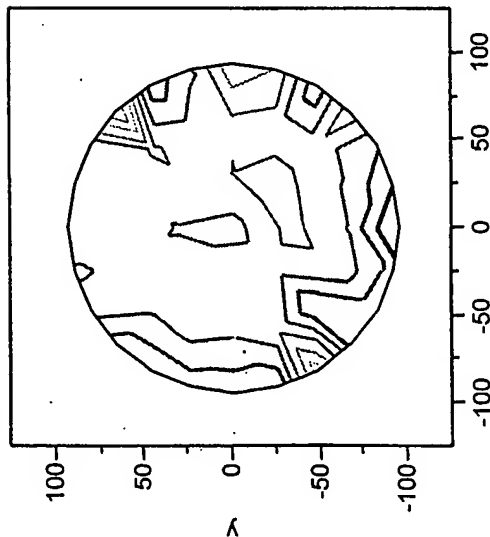
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Contour Plot: IC1400 Pad



Contour Plot: A32 Pad

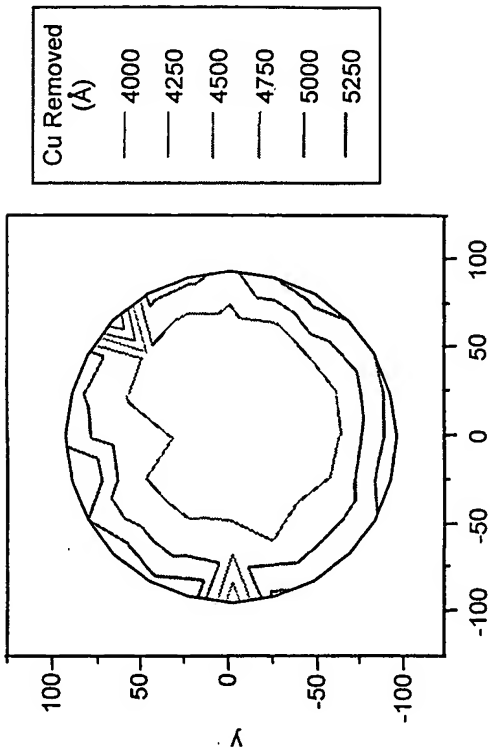


FIGURE 2A

Insert

FIGURE 2

delete

FIGURE 2B

Insert

Drawing OK  
AD